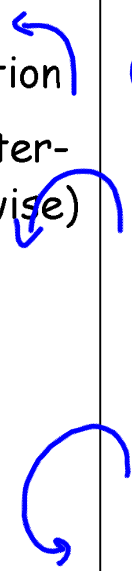



Transformation	Definition	Example
Translation (slide)	<ul style="list-style-type: none"> - A FIGURE MOVES OR 'SLIDES' IN A CERTAIN DIRECTION - BOTH FIGURES ARE \cong - FIGURES HAVE THE SAME ORIENTATION 	
Reflection (flip)	<ul style="list-style-type: none"> - WHEN A FIGURE FLIPS OVER A DEFINED LINE - BOTH FIGURES ARE \cong - FIGURES HAVE OPPOSITE ORIENTATION 	
Rotation (spin)	<ul style="list-style-type: none"> - WHEN A FIGURE ROTATES OR 'SPINS' AROUND A POINT - BOTH FIGURES ARE \cong - FIGURES HAVE THE SAME ORIENTATION 	
Dilation	<ul style="list-style-type: none"> - WHEN A FIGURE ENLARGES OR SHRINKS IN SIZE (SCALE FACTOR) - IMAGES ARE SIMILAR - FIGURES HAVE SAME ORIENTATION 	

Transformation	How to change Coordinates
<p>Rotation (counter-clockwise)</p> 	$90^\circ (x, y) \Rightarrow (-y, x)$ $180^\circ (x, y) \Rightarrow (-x, -y)$ $270^\circ (x, y) \Rightarrow (y, -x)$
<p>Reflection</p> 	$y = x \quad (x, y) \Rightarrow (y, x)$ $y = -x \quad (x, y) \Rightarrow (-y, -x)$